while the pressure had risen to 29.72. On the morning of the 11th the storm lay off Manzanillo, where it gave locally heavy rains to some of the coast towns, but no later report concerning it is yet available. It is interesting to note in connection with this storm that a disturbance appeared over the northwestern part of the Gulf of Mexico on the afternoon of the 12th.

On the 15th a northeast gale of force S was experienced by the British steamer Toco, in 17° 15′ N., 107° W., accompanied by only a slight depression of the barometer. On the 16th, 17th, 22d, and 23d gales of force 8 to 10 occurred over and south of the Gulf of Tehuantepec, but these were not accompanied by barometric disturbances. Observers of the whole northeast gales of the 16th and 17th report that they began and ended suddenly, their onset being accompanied by heavy rain squalls, which shortly cleared, so that generally fair weather prevailed during the remainder of the blow.

Fog was little observed in west longitudes this month, except along the American coast north of the 30th parallel. West of the 180th meridian scattered observances of fog were recorded on eight days.

## WATERSPOUT ON THE SOUTH PACIFIC OCEAN

Mr. J. V. Bray, second officer of the British motor ship Aorangi, Capt. R. Crawford, Sydney, Australia, toward Honolulu, gives the following account of a waterspout observed November 1, 1925, in 5° 42′ S., 172° 39′ W.:

When first observed at 7 a. m. by senior second and fourth officers, waterspout appeared descending from a white cumulus cloud and revolving in a counterclockwise direction. The phenomenon disappeared about 20 minutes after first observed, and about half way down during descent the spout could be plainly seen to take a sharp turn almost at right angles, curving around a small cumulus cloud underneath; also spray, distinctly white, to be seen rushing up the spout. When abeam it lifted and disappeared. The whole aspect was white—ascending spray and descending cloud. The clouds were of a clearly defined cumulus type. Other observers state that before final descent the spout thinned and could be seen through. Distance of spout, 2½ miles; estimated height, 3,000 feet. Sky clear, one-fifth clouded by tumulus. Wind ENE. 1. Temperature 83°.—W. E. H.

## TWO TYPHOONS OVER THE PACIFIC AND ONE DE-PRESSION OVER THE PHILIPPINES IN NOVEMBER,

By Rev. José Coronas, S. J.

[Weather Bureau, Manila, P. I.]

The first Pacific typhoon had appeared already in our weather maps, on the 24th of the last month of October, near 145° or 146° longitude E. and 9° latitude N. It moved first WNW., passing about 100 miles to the north of Yap in the afternoon of the 27th. On the 28th it began to move northwestward about 600 miles to the east of north Samar. The steamer Comliebank, on her way from San Francisco to Manila, was well under the influence of this typhoon on the 28th and 29th. On October 31, when the center was east of Balintang Channel near 127° longitude E. and 20° latitude N. there was a decided change of the direction to the N. and N. by E., the center being situated at 6 a.m. of November 1 to the south of Naha in about 25° latitude N. between 127° and 128° longitude E.; the barometric minimum in Naha was then 745.5 mm. (29.35 ins.) with strong winds from NE. The typhoon finished its recurving to ENE. on November 1, and filled up on the 2d between Japan and the Bonins.

The second Pacific typhoon was shown by our weather maps on October 31 over the western Carolines near 150°

longitude E. and 8° latitude N. It moved NNW. on October 31, NW. and WNW. on November 1, and recurved to the N. and NE. on November 2 and 3. The center of the typhoon passed about 100 miles to the north of Yap in the afternoon of November 1. The recurving to the north took place near 138° longitude E. and 19° latitude N. Our maps showed the center to the southeast of the Bonins at 6 a. m. of the 4th near 145° longitude E. and 24° latitude N. moving NE. or NE. by E.

The depression which traversed the Philippines on the 9th of November appeared at 6 a.m. of the 6th to the SSE. of Yap near 140° longitude E. and 5° latitude N. After moving practically WNW. for over two days, it crossed the Visayan Islands on the 9th with an almost due west direction and an extraordinary rate of progress of nearly 19 miles per hour. The center reached the southern part of Indochina in the early morning of November 11.

## ADDITIONAL NOTE ON TROPICAL CYCLONE OF OCTOBER 22-25, 1925, OFF WEST COAST OF MEXICO

By CHARLES C. ALLEN

[Weather Bureau Office, San Francisco, Calif., December 22, 1925]

During the latter part of October, 1925, a tropical storm of violent character appeared off the west coast of Mexico to the south of latitude 20° N., moving in a direction along the Panama-San Francisco steamer route until it turned inland near Cape Corrientes on the 24th-25th.

This disturbance, which has already been referred to in the Monthly Weather Review, for October, overtook several steamers in its progress along the coast. Capt. J. A. Mordue, of the British steamer *Kathlamba* has furnished a detailed and interesting report of his encounter with this cyclone.

On the night of October 22-23 it became evident that a storm from the south was overtaking the Kathlamba, the wind having changed during the night from light and variable to fresh easterly, accompanied by squalls. barometer remained steady at 29.78 inches until noon of the 23d, after which hour the pressure fell steadily, and after 8 a.m. of the 24th quite rapidly (from 29.60 ins. at 8 a. m. to 28.57 ins. at noon), with the wind backing to the northeast and north, increasing to force 12. As the backing of the wind indicated that the center of the storm was moving upon the ship quite swiftly, and even then swerving to the eastward, Captain Mordue altered his course to the westward in hope of escaping the full violence of the storm. He succeeded in that one particular, but nevertheless experienced wind and sea of great fury. His own words tell graphically of the situation at the height of the storm, when in an estimated position at noon, October 24, of latitude 18° 53' N., and longitude 106° 05' W. At that time the wind was north, force 12, and the lowest pressure reading was 28.57 inches. His description, in part, reads:

During this time the wind was sweeping overhead. Canvas weather screens and dodgers and light awnings over the bridge and poop were torn from their fastenings and whirled away to leeward. One of the starboard boats was blown adrift from its chocks, and some idea of the force of the wind can be formed from the fact that the pressure on the steam whistle lanyard was sufficient to cause the whistle to sound full blast at frequent intervals.

The ship was swept by a continuous blinding smother of rain and spray through which the dim loom of the white painted foremast could just be discerned from the bridge—the limit of our vision forward, the forecastle head and all on it being completely

obliterated.